MobileView™ Tablet T750 Flash Update

(Cat. No. 2727-T7B30D1F)

Introduction

The MobileView Tablet 750 includes the capability to automatically update its operating system and application firmware by means of an utility built into the device. MobileView firmware updates will be provided in order to enhance program functionality as well as to integrate program fixes.

TIP

The latest Flash update image files will be available on the Allen-Bradley web site: http://www.ab.com/eoi/.

TIP

"Flash" firmware refers to the ability of the Tablet chips to be updated "in a flash"—without physically replacing any components such as ROM chips. The flash firmware update is completed by using a standard communications software program.

Publication 2727-GR001A-EN-P - September 2001

Update Requirements

The following items are required in order to perform the firmware update for the MobileView Tablet 750:

- MobileView Tablet 750.
- An Allen-Bradley 2727-TRC1 serial cable.(1)
- A computer running either Microsoft® Windows 98, Windows NT, or Windows 2000 Professional with a free serial (COM) port.
- Microsoft HyperTerminal(2) (or an equivalent terminal emulation program capable of performing XModem downloads at 115,200 or higher baud rates).
- The flash firmware image file.(3)

Update Procedures

Perform the following to update your MobileView Tablet 750.

Backup Data on Tablet

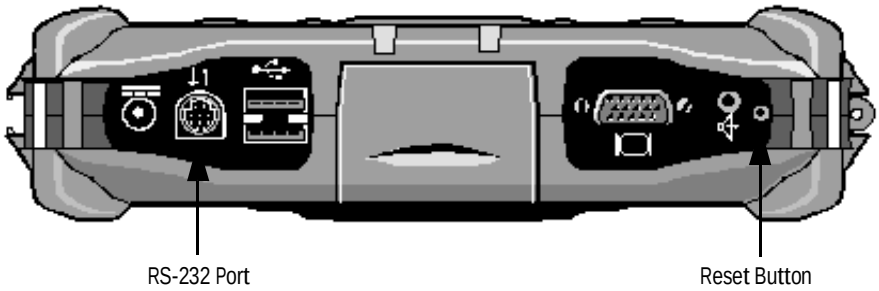
IMPORTANT Anything in RAM will be lost.

Before updating your Tablet, it is strongly recommended that you back up any data and user-defined settings. Information about saving registry settings, application files, and data is provided in your *MobileView Tablet 750 User Manual*, publication 2727-UM001B-EN-P.

(1) The cable is used for serial communications between the PC and the MobileViewTablet 750.
(2) HyperTerminal is normally installed on your Windows-based computer as part of the operating system. For more information, see your Windows operating system *User's Guide*. Note that you may also use another standard Windows-hosted telecommunications program to perform the update, if desired.
(3) Flash firmware files provided by Rockwell Automation are of the form *NKmvX_X_X_X.bin*

Connect the Serial Cable

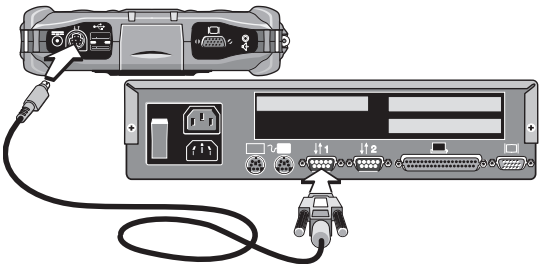
1. Attach the small end of the serial cable (Allen-Bradley catalog number 2727-TRC1) to the RS-232 port on the bottom panel of the MobileView Tablet.



TIP

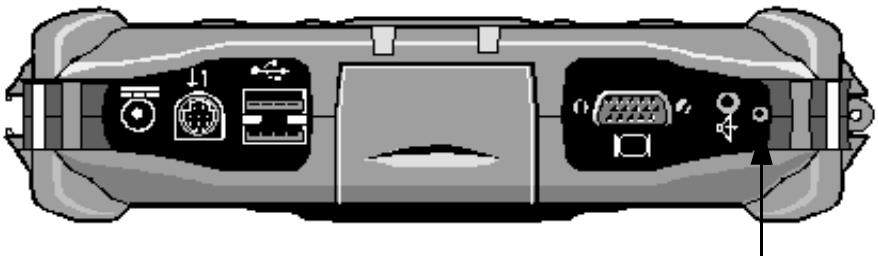
For more information about port locations on the MobileView Tablet, see your *MobileView Tablet 750 User Manual*, publication 2727-UM001B-EN-P.

2. Connect the larger end of the serial cable to a serial port on your computer.



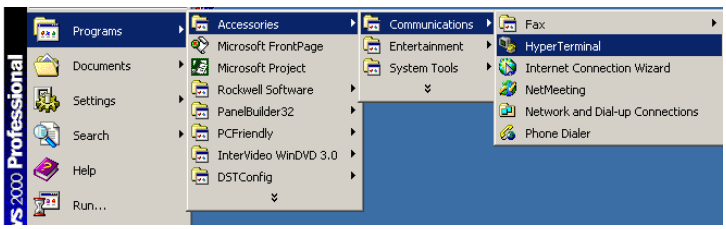
Power Off the MobileView Tablet

Use the stylus to depress and hold the reset button for at least five seconds, the MobileView Tablet's screen backlight and battery indicator LEDs will turn off.



Start Windows HyperTerminal on Host PC

1. Click on the Windows Start button and select Programs, Accessories, Communications, and HyperTerminal folder from the menu.

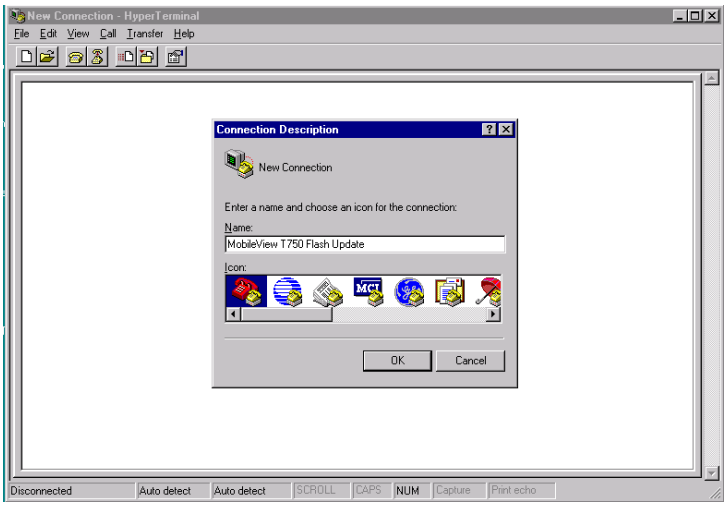


TIP

If HyperTerminal is not installed, select Settings, Control Panel from the Windows Start menu. Next select Add/Remove Programs and click on the Windows Setup Tab. Click on the Communications options and then the Details button. Locate and place a checkmark next to HyperTerminal in the list of installed options. Click OK. Note that you will be prompted for the Windows installation CD to complete the installation.

2. In the HyperTerminal folder, locate the Hypertrm.exe icon and click twice.

3. Enter a name in the Connection Description box (e.g., MobileView T750 Flash Update).



4. Click OK.

Configure HyperTerminal Communications on Host PC

You must now configure the connection HyperTerminal to communicate with the MobileView Tablet.

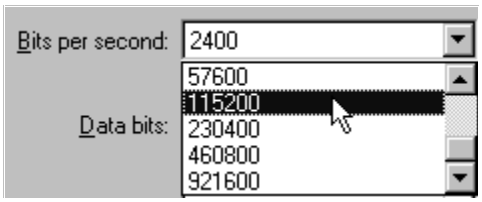
Selecting the COM Port

1. In the Connect To box, select the COM port used to connect the PC with the Tablet.

   In most cases this will be COM1. Click OK.

Configuring the COM Port

In the Bits per second box, select 115200, 230400, or 460800.



TIP

The higher the baud rate, the faster the transfer of the image file to the Tablet. For standard COM ports, the highest baud rate supported is 115,200 bits per second (BPS). Note that some vendors sell extra high speed communications ports that support baud rates up to 921,600 BPS. Expect roughly a 20 minute transfer time for 115,200 baud; 10 to 12 minutes for 230,400 baud; and 5 to 7 minutes for 460,800 baud (MobileView Tablet maximum rate).

IMPORTANT

You must select at least 115,200 Bits Per Second; lower baud rates are not supported.

2. Leave all other settings (Data Bits, Parity, Stop Bits, Flow Control) at their defaults.

3. Click OK.

Configure MobileView Tablet Serial Communications

You must now configure the Tablet's serial port used to communicate with the host PC. This is done by using the Navigational, Program and Enter buttons on the front of the Tablet.

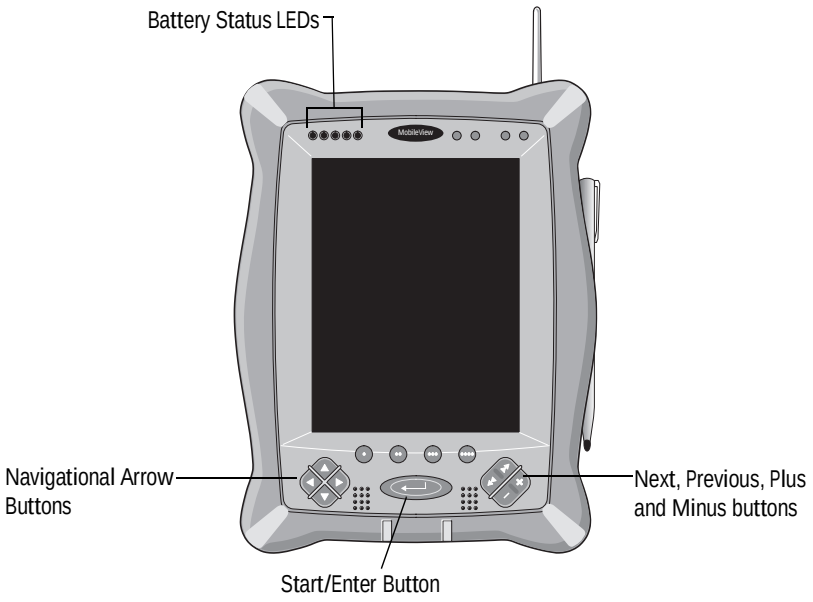


Table A Configuring the Baud Rate

Baud Rate	Button Combinations
115,200	Up arrow, •, and enter buttons
230,400	Up arrow, ••, and enter buttons
460,800	Up arrow, •••, and enter buttons

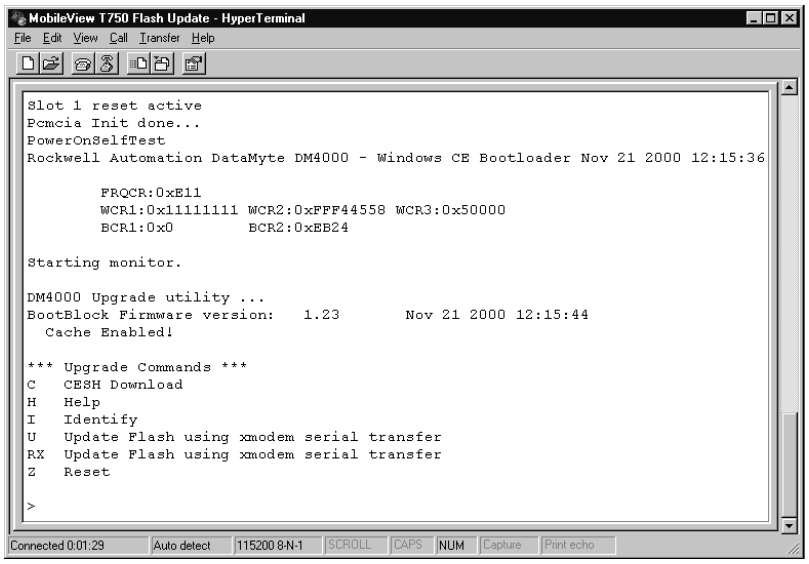
Simultaneously press and hold the up arrow and appropriate Program Button, and, while both buttons are down, press and hold the Enter button, until only the right most battery LED is lit. This indicates that the Tablet's baud rate is set and the Tablet is ready for a flash update.

Perform the Flash Update

TIP

Before actually transferring the flash firmware image file to the Tablet, you should make sure it is stored in a location accessible to the host computer.

Once communications are successfully established between the Tablet and the host PC running HyperTerminal, the HyperTerminal screen will present a Command List as shown below.



TIP

If the Command List does not appear on the HyperTerminal screen, you should first confirm the baud settings and port configuration of HyperTerminal and then check the cable connections between the Tablet and the host computer. Next, close HyperTerminal and then reopen it. If this does not resolve the problem, reset the Tablet and make sure you press the button-combinations as shown in Table A. If you still cannot see the Command List after performing these steps, contact Rockwell Automation for additional assistance.

1. Type “U” and press Enter.

IMPORTANT After pressing Enter, the HyperTerminal screen will respond by showing a series of ‘C’ characters immediately below the command prompt. You will have a total of about 45 seconds to perform steps 2 through 5 before the communications link will time out.

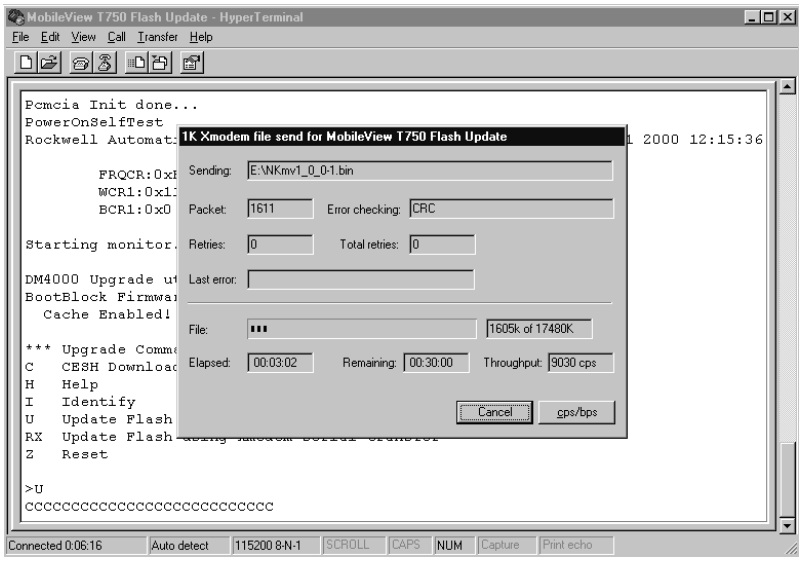
If the transfer times out, simply repeat these steps.

2. Select Transfer from the menu bar and then select Send File.
3. Select the 1K Xmodem protocol from the Protocol drop-down list.
4. Click on the Browse button and select the flash firmware update file to send to the Tablet. The flash firmware update file format is a .bin file (NKmvX_X_X-X.bin).
5. Click on the Send button to begin the update.

Transfer Status

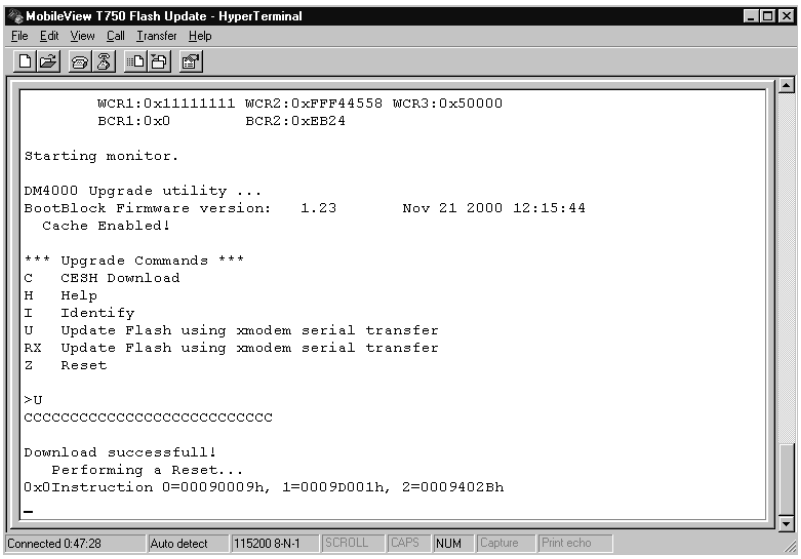
HyperTerminal will next display a transfer status window, indicating the elapsed time, time remaining, and cps throughput.

TIP Transfer times will vary on the baud rate selected. For 115,200 baud, expect about a 30 minute transfer time.



Transfer Complete

When the transfer is complete, the HyperTerminal screen will look similar to the following:



Once the transfer is complete, the Tablet will automatically restart.

Select Disconnect from the Call menu or close the Hyperterminal Window to terminate the connection.

Rockwell Automation Support

Rockwell Automation offers support services worldwide, with over 75 Sales/Support Offices, 512 authorized Distributors and 260 authorized Systems Integrators located throughout the United States alone, plus Rockwell Automation representatives in every major country in the world.

Local Product Support

Contact your local Rockwell Automation representative for:

- sales and order support
- product technical training
- warranty support
- support service agreements

Technical Product Assistance

If you need to contact Rockwell Automation for technical assistance, please review the Troubleshooting information in your *MobileView Tablet T750 User Manual*, publication 2727-UM001 first. Then call your local Rockwell Automation representative. Rockwell Automation phone numbers appear on the back of this publication.

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Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

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